ECONOMIC FREEDOM - MODERN SOCIETY GROWTH VECTOR

Mădălina Maria BREZULEANU¹,

e-mail: brezuleanu.madalina@yahoo.com

Abstract

Specialised literature regarding freedom, economic growth and development, has constantly shown that in the nations that have less restrictions regarding the activity of the private economic agents, the transactions tend to register higher levels of economic growth. These things may be less clear in the context in which there are more hypotheses: if freedom leads to growth, or growth is a determining factor of freedom, or if both are in a causation relationship. To evaluate these possibilities, Granger causation tests are being done in relation to the annual freedom indicators, elaborated by The Heritage Foundation and Freedom House. These indicators analyse the basic components which include the commercial policy, taxation, government intervention, monetary policy, capital flows, foreign investments, banking services, control of salaries and prices, property rights, and regulation of the markets subject to testing and summary assessment of freedom. The main objective of the research is the analysis of the relationship between economic freedom and economic growth. There are four indicators used to measure the level of economic freedom and they are the ones elaborated by Fraser Institute, The Heritage Foundation, Freedom House and Scully and Slottje. The research methodology used to attain the objectives mentioned above comprises qualitative methods (meta-analysis of the specialised literature) and quantitative methods (econometric methods-regression and correlation analysis, selfcorrelation tests, comparative analysis and correspondence analysis). The main aim of the qualitative analysis is focused on the concept of economic freedom, an overview of the history and the chronology of its presence in the economic theory and practice, as well as on the ways of quantifying it using diverse indices that measure economic freedom in countries around the world. In this research I have used the index of economic freedom elaborated by Heritage Institute. The main components of this index are: the rule of law, government limitations, efficiency of regulations, but also the freedom of the markets. We consider that this index is a good measure of economic freedom; however, in the performed analysis we have also focused on its various components and have analysed separately the effects on the economic growth. The indicators that were analysed were taken from the statistical databases such as Heritage, World Bank, Eurostat. The indicators selected for performing the analysis were taken at the level of the countries of the European Union with characteristic values of the year 2019.

Key words: economic freedom, real GDP increase rate (%), foreign direct investments, export volume, unemployment rate

A problem identified in the scientific research on economic freedom was represented by the lack of a measuring unit that could facilitate its correlation with the diverse economic contributions. In this context, numerous studies regarding economic freedom may be contested with regard to their scientific contribution since the economists did not have sufficient data, which were at times incomplete as well. This preoccupation has grown year after year, today being possible to measure the economic reality and to test the various hypotheses. The main objective of the research is represented by the analysis of the relationship between economic freedom and economic growth. The scientific objective consists in theoretically highlighting the impact of economic freedom on the most important economic indicator, *i.e.* the economic growth.

MATERIAL AND METHOD

The research methodology used in order to achieve the objectives mentioned above comprises qualitative methods (meta-analysis of specialised literature) and quantitative methods (econometric methods-regression and correlation analysis, self-correlation tests, comparative analysis and correspondence analysis).

The combination of methods used within the research involves a triangulation procedure which minimises the inconveniences specific to each research method, which helps the researcher reach the desired results through many methods (Barro R., 1998).

The methodological triangulation ensures an accurate perspective on the studied phenomena. The theoretical approach has been founded

¹ "Alexandru Ioan Cuza "University of Iași, Romania

through the bibliographic study of the concepts of economic freedom, democracy and development, which may lead to a grounded substantiation of the achieved empirical approach.

The statistical-economic and econometric research methods used in this study will seek to emphasise the phenomena in the analysed field, which are, in short: statistical methods (collection and processing of quantitative data, analysis of their evolutionary trend), assessment methods (quantitative and qualitative determinations, such as deduction, comparison, statistical calculations, etc.) and econometric methods (regression and trend patterns).

As an empirical part of the research, we will analyse the relation between the economic freedom and the economic growth with the help of The Heritage Foundation Index of Economic Freedom.

RESULTS AND DISCUSSIONS

The relations that have been established between economic freedom and economic growth, as well as the relations between individual segments (sub-indices) of economic freedom and economic growth have been taken into account in numerous studies that have shown the different contributions of individual elements of economic freedom that lead to economic welfare.

Starting from these aspects a series of questions have emerged, which we will try to answer following the theoretical and empirical research: *Does economic freedom contribute to growth?* And: *Which of the components of economic freedom have a significant influence on the rate of economic growth?*

The first studies regarding the interdependences between economic freedom and economic growth were accomplished with the help of Scully and Slottje index (1991). The results of the studies carried out by Ayal, E. B., Karras, G. (1998) and Haan (2007) showed that there is a statistically positive and significant relation between the GDP per capita or the rhythm of economic growth and the field of economic freedom. Other studies, large in number, which used the **Index of economic freedom** (IEF,

published by The Heritage Foundation) and the **Economic freedom index** (EFI, published by Fraser Institute), confirmed the impact of economic freedom on economic growth (Gwartney J., 2007; Bennett D., 2017, Ali A.M., Crain W.M., 2002; Doucouliagos C.,2006; Medina Moral V.2018).

A problem identified in the scientific research on the economic freedom has been the lack of a measuring unit that could facilitate its correlation with the diverse economic contributions. In this context, many studies regarding the economic freedom may be contested with regard to their scientific contribution since the economists did not have sufficient data, these being at times incomplete. This preoccupation has grown year after year, today being possible to measure the economic reality and to test the various hypotheses.

A series of studies (Alvarez Arce J, 2003; Bennett D.L., Nikolaev, B., 2017; Banneheka S., 2015 Justesen, M.K., 2008; Iacobuță Andreea 2005) attempted to analyse the nature of the ;connection between economic freedom and economic growth. Using various econometric methods, as well as various indicators of economic freedom, all economists tried to answer the same question: "Does economic freedom determine economic growth?"

Some economists have found a positive relation, others a negative one, and for others the relation has not indicated statistically significant results. There have been numerous studies that have sought to determine which segment of economic freedom is the most conducive to growth so as to create an adequate economic policy that may improve and contribute to economic welfare.

The object of the research has also been that of discovering the nature of the relations between the level of democracy, political, civic and economic freedom and their direct or indirect influence on growth. The long term economic growth is correlated with a potential growth of the productivity of an economy, and in *figure 4* the determining factors of the long term economic growth may be observed.



Figure 1 The determining factors of the long term economic growth (after Mihut, I.S., Lutas, M., 2013),

In this analysis we have used the index of economic freedom elaborated by The Heritage Institute. The main components of this index consist in: *the rule of law, government limitations, efficiency of regulations, but also the freedom of the markets.* We consider that this index is a good unit for measuring the economic freedom; however, in the performed analysis we have also focused on its various components and have analysed separately the effects on the economic growth. The indicators that have been analysed were taken from the statistical databases such as Heritage, World Bank, Eurostat.

The indicators selected for performing the analysis were taken at the level of the countries of the European Union with characteristic values for the year 2019. In *table 1*, for each indicator we have mentioned its name, the definition and the data source.

Table	1
-------	---

Name of indicator	Definition	Data source						
Economic	Measures the impact of the freedom of free markets indicating the correlation	The Heritage						
freedom	between economic freedom and progress	Foundation						
Real GDP growth rate (%)	The real economic growth rate or the real growth rate of GDP measures the economic growth, expressed by means of the gross domestic product (GDP), from one period of time to another. It is used by the decision factors in order to determine the growth in time and to compare the growth rates of the similar economies to different inflation rates	Eurostat						
Foreign direct investments (% GDP)	Foreign direct investments refer to the direct investment capital flows in an economy	World Bank						
Volume of exports (% from GDP)	The export volume is made up of the value of all goods and services provided on the market.	World Bank						
Unemployment rate (% from the total of workforce)	The unemployment rate represents the number of unemployed as a percentage of the workforce (the workforce is the sum of the employed and the unemployed people)	World Bank						
The rule of law	The rule of law guarantees the fundamental rights and values, permits the application of EU law and supports an investment-friendly business environment. This indicator takes reference range values between 0 and 100	The Heritage Foundation						
Government size	The government size is derived from its role of spending in an economy. This indicator takes reference range values between 0 and 100	The Heritage Foundation						
Efficiency of regulations	It concerns the efficiency of business freedom, of labour freedom and the monetary freedom. This indicator takes reference range values between 0 and 100	The Heritage Foundation						
Freedom of markets	It refers to trade freedom, investment freedom as well as financial freedom. This indicator takes reference range values between 0 and 100	The Heritage Foundation						

In the following we will analyse the Heritage indicators such as the economic freedom, the real GDP growth rate, foreign direct investments, the volume of exports and the unemployment rate, in order to get an overview of the relationship between the real GDP growth rate and the factors that can influence it in a sample of 27 countries in 2019 (*table 2*).

Table 2

Country	Economic Freedom 2019	Rata reala de cresterea aPIB 2019	Investitii straine directe	Volumul exporturilor(% of GDP)	Rata somajului
Austria	8.2	1.5	-1.82	45.84	4.49
Belgia	7.62	2.1	-5.61	163.71	5.36
Bulgaria	7.76	4	3.01	124.64	4.23
Croatia	7.36	3.5	1.87	101.8	6.62
Cipru	7.89	5.3	100.66	150.97	7.07
Cehia	7.87	3	4.25	141.79	2.01
Damenarca	8.17	2.1	-1.01	110.6	5.02
Estonia	8.11	4.1	9.86	143.93	4.45
Finlanda	7.92	1.2	5.8	79.6	6.07
Franta	7.55	1.8	2.1	64.14	8.44
Germania	7.91	1.1	1.73	87.59	3.14
Grecia	7.15	1.8	2.43	81.99	17.31
Ungaria	7.53	4.6	56.36	161.23	3.42
Irlanda	8.21	4.9	-11.68	252.33	4.95
Italia	7.61	0.4	1.55	59.95	9.95
Lituania	8.21	4.6	2.87	149.36	6.26
Letonia	7.94	2.5	3.16	120.37	6.31
Luxemburg	7.84	3.3	-16.27	380.1	5.6
Malta	8.03	5.9	27.69	271.43	3.4
Olanda	7.96	2	-18.6	155.27	3.38
Polonia	7.2	4.7	2.41	106.03	3.28
Portugalia	7.79	2.7	4.3	86.56	6.46
Romania	7.88	4.2	2.94	84.88	3.91
Slovacia	7.61	2.6	2.19	184.13	5.75
Slovenia	7.43	3.3	3.97	159.27	4.45
Spania	7.89	2.1	1.06	66.97	14.1
Suedia	7.72	2	3.18	91.43	6.83
TOTAL	202.16	81.3	188.4	3625.91	162.26
MEDIA UE	7.49	3.01	6.98	134.29	6.01

Heritage Indicators

Analysing the data from Table 2 we can observe great differences among the 27 EU countries analysed. In *figure 2* it may be noticed that the average of economic freedom is 7.49, with the lowest values for Greece (7.15) and the highest value of the index being recorded by Austria with 8.2.





If we analyse the real GDP growth rate in the year 2019 (*figure 3*), compared to the EU average which is 3.01, the highest value was recorded for Malta (5.9) and the lowest value for Italy with only 0.4.



Figure 3 The real GDP growth rate 2019



Figure 4 Foreign direct investments

Analysing the volume of the exports (% from GDP) we may observe from *figure 5* that the EU average is 134.29 with maximum values of

380.1 for Luxembourg and only 45.84% in the case of Austria.



Figure 5 Export volume (% GDP)

The unemployment rate (Figure 6) at EU level is 6.83 % with maximum values in the case of

Greece (17.31%) and minimum values for Czechia with 2.01 %.



Figure 6 Unemployment rate

Next we will use the Fraser indicators such as the real GDP growth rate, the government size, the property rights, money or capital and regulations so as to get an overview of the relationship between the real GDP growth rate and the factors that can influence it in a sample of 27 countries in 2019 (*table 3*)

Fraser Indicators

Table 3

Country	The real GDP growth rate 2019	Government Size	Property rights and the legal system	Money/Capital	Freedom of movement	Regulation
Austria	1.5	5.43	8.33	9.42	8.45	7.65
Belgium	2.1	7.29	7.45	9.41	8.39	8.12
Bulgaria	4	7.02	5.94	9.66	8.38	7.81
Croatia	3.5	5.56	6.07	9.38	8.33	7.46
Cyprus	5.3	7.25	6.32	9.34	8.64	7.93
Czechia	3	6.64	6.99	8.98	8.43	8.31
Denmark	2.1	5.34	8.61	9.6	8.77	8.54
Estonia	4.1	6.6	7.7	9.36	8.68	8.22
Finland	1.2	5.14	8.6	9.39	8.5	7.96
France	1.8	5.08	7.15	9.41	8.56	7.56
Germany	1.1	6	7.71	9.41	8.34	8.1
Greece	1.8	5.41	5.93	9.3	7.39	7.18
Hungary	4.6	5.93	6.31	9.52	8.39	7.49
Ireland	4.9	6.72	7.68	9.5	8.73	8.4
Italy	0.4	5.72	6.47	9.41	8.69	7.78
Lithuania	4.6	7.66	7.18	9.33	8.63	8.27
Latvia	2.5	6.44	7	9.31	8.71	8.26
Luxembourg	3.3	5.58	8.17	9.3	8.2	7.95
Malta	5.9	6.97	6.47	9.53	8.75	8.43
The Netherlands	2	5.11	8.35	9.26	8.96	8.12
Poland	4.7	6.12	6.13	8.3	8.02	7.44
Portugal	2.7	6.28	7.21	9.44	8.79	7.24
Romania	4.2	7.25	6.41	9.38	8.85	7.52
Slovakia	2.6	6.3	6.26	9.32	8.36	7.82
Slovenia	3.3	5.45	6.63	9.58	8.21	7.28
Spain	2.1	6.42	7.31	9.45	8.44	7.84
Sweden	2	4.68	7.87	9.74	8.49	7.81

The value of the indicator called the government size presented in *figure 7* has an average value at

EU level of 6.13 with minimum values for Sweden with 4.68 and maximum for Lithuania with 7.66.



Figure 7 Government size

Regarding the capital or the money, as the situation is depicted in *figure 8*, it follows that the highest values are recorded in the case of Sweden

with 9.74, and the lowest value of the indicator being 8 in the case of Poland, the EU average being of 9.37.





The freedom of movement presented in *figure 9* for the majority of the analysed countries has values

close to the EU average which is 8.48, the lowest value being recorded for Greece with 7.39.



Statistically interpreting the correlations between the analysed indicators for the 27 countries considered for the study, we have obtained the values in *figure 10*, which demonstrate the correlations between the indicators.

R	egression	Statistics											
Multiple R 0.3				9511									
R Square	25666	6783											
Adjusted R Squa	8250	7792											
Standard Error		0.2	6848:	5055									
Observations				27									
ANOVA													
	đC	SS		MS	1	ন	Significance F						
Regression	5	0.217572021	0.0	43514404	0.6036	560571		0.697807834					
Residual	21	1.513768719	0.0	72084225									
Total	26	1.731340741											
		Coefficient	5	Standard Error		t St	at	P-value	Lower	95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept		7.327052	2099	1.54956	5545	545 4.7284		0.000114077	4.10455	4138	10.54955	4.104554	10.54955
Real GDP growt 2019	th rate	-0.024319	648	0.04870	5805	-0.49	931723	0.622746777	0.12560	0.125608914		-0.12561	0.07697
Size of Governn	nent	-0.033004	362	0.0984	09847265		162728	0.740827293	0.23778	9447	0.171781	-0.23779	0.171781
Property rights and the legal system		-0.002960	261	0.09905	5468	-0.029	884879	0.976441067	0.20895	7383	0.203037	-0.20896	0.203037
Freedom of mov	ement	0.277116	5352	0.20689	06895629 1.33		401671	0.19475691	0.15314	6663	0.707379	-0.15315	0.707379
Regulation		-0.001305	151	0.20099	6127	-0.006	493416	0.994880332	0.41929	9479	0.416689	-0.4193	0.416689
(Ctrl) 🕶		1	Real GDP growth rate 2019		Size of Government		Property right legal sys	rights and the Fr al system n		eedom of ovement	Regulation	Money/capital	
Real GDP growth rate 2019				1									
Size of Government			0.607915972			1							
Property rights and the legal system			-0.419202771		-0.31	374975402		1					
Freedom of movement			0.122068476		0.23	30824285	0.3	36665788	665788 1				
Regulation			0.12	0.125924387 0.3178499		17849976	0.4	0.47656588 0		508317632	1		
Money/capital				-0.15	2781483	-0.10	04947592	0.20	06878784	0	289046698	0.11336014	1

Figure 10 The determination of the correlations between the economic freedom and the economic growth

CONCLUSIONS

The determination of the correlations between the economic freedom and the economic growth has demonstrated a positive relationship between the economic freedom and the economic growth of society in the 27 EU countries analysed in terms of Heritage and Fraser Indicators. The study regarding the relationship between the economic freedom and the GDP growth has registered a positive relationship in the case of most countries; however, we need to be objective in choosing the measure of economic freedom. The robustness of the results has been carefully analysed since the potential problem of multicollinearity is one of the negative effects of composing an index. The obtained results indicate that the economic freedom counts for the growth and the development of a country. This does not mean that when economic freedom grows it is determining for the economic growth, because the influence of some of the index categories is statistically insignificant, and some of the significant variables may have a negative influence.

Economic freedom does not mean eliminating any form of state intervention. On the contrary, even in a free society, there is a minimum state that ensures the protection of the individuals' freedom in society.

REFERENCES

Alvarez Arce J., 2003 - Economic Growth and Freedom: A Causality Study, The Cato journal.

- Ayal E.B., Karras G., 1998 Components of economic freedom and growth: an empirical study. The Journal of Developing Areas, 32(3):327-338.
- Ali A.M., Crain W.M., 2002 Institutional distortions, economic freedom, and growth. The Cato Journal, 21(3):415-427.
- Barro R., 1998 Determinants of Growth Economic: A Cross-Country Empirical Study, MIT Press Books, The MIT Press.
- Bennett D.L., Nikolaev B., 2017 On the ambiguous economic freedom-inequality relationship. Empirical Economics, 53(2):717-754
- Banneheka S., 2015 Sunt libertatea economică și creșterea economică realmente legate, Revista Studia Universitatis Petru Maior, Series Oeconomica, Târgu Mureș, Romania.
- **De Haan J., Sturm J.E., 2007** Handling economic freedom in growth regressions: A reply to Cole and Lawson. Economic Journal, 4(1):79-82.
- **Doucouliagos C., Ulubasoglu M.A., 2006** Economic freedom and economic growth: Does specification make a difference. European Journal of Political Economy, 22 (1):60- 81.
- **Gwartney J., Lawson R., Hall J., 2015 -** Economic Freedom Dataset, 2015 Annual Report. Vancouver: The Fraser Institute.
- lacobuță A., Frunză R., 2006 The Relationship between Institutional Efficiency and Economic Growth from the New Institutional Economics Perspective, Analele Științifice ale Universității "Alexandru I. Cuza" din Iasi.
- Justesen M.K., 2008 Efectul libertății economice asupra creșterii revizuit: noi dovezi privind cauzalitatea dintr-un grup de țări 1970-1999. Jurnalul European de Economie Politică, 24(3),
- Medina-Moral E., Vicente J., 2018 Economic freedom, good governance and the dynamics of development, Journal of Applied Economics.
- Mihuţ I.S., Luţaş M., 2013 Economic growth: challenges, opportunities and main determinants, Josip Juraj Strossmayer University, Osijek
- Scully G.W., Slottje D. J., 1991 Ranking economic liberty across countries. Public Choice, 69(2), ***Heritage Fundation, Index of Economic Freedom în Europe-2019